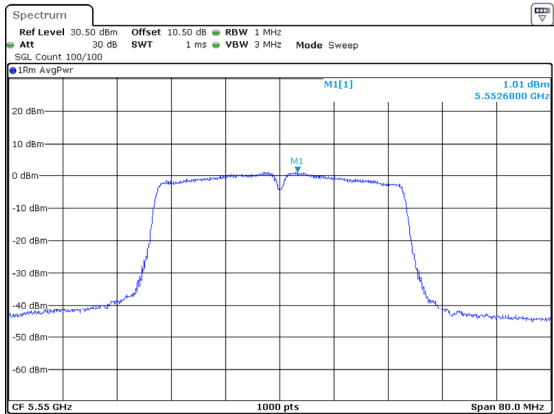
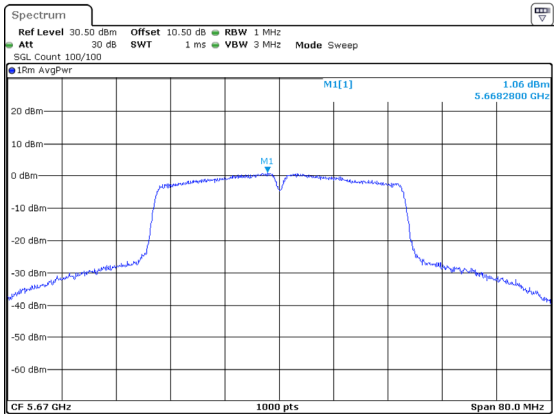


802.11ac40_5550MHz_Chain 2



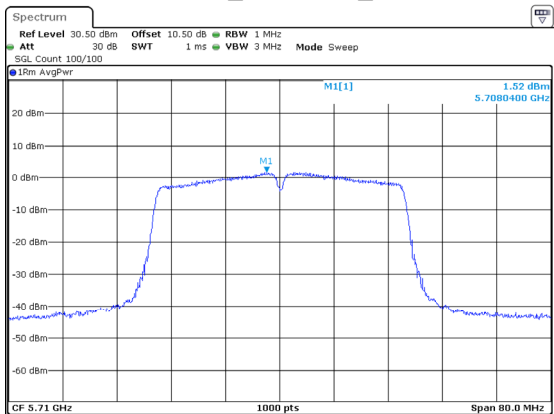
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 14:58:17

802.11ac40_5670MHz_Chain 2



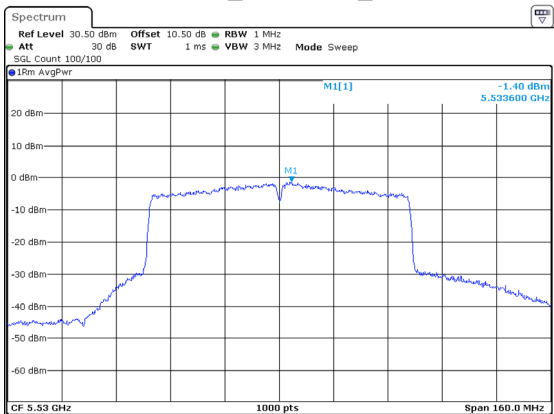
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 15:01:34

802.11ac40_5710MHz_Chain 2



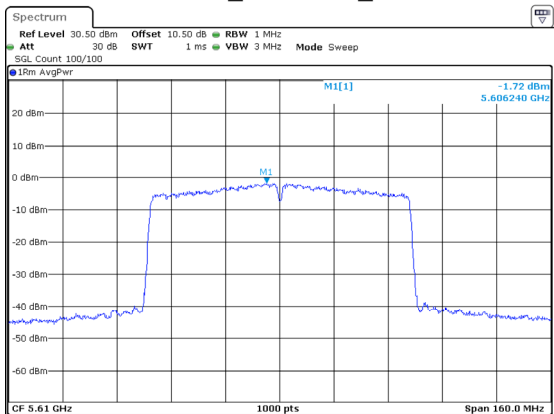
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 15:02:10

802.11ac80_5530MHz_Chain 0



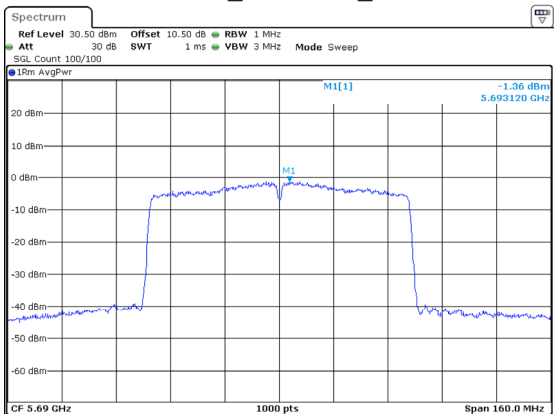
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Date: 5.DEC.2024 18:43:00

802.11ac80_5610MHz_Chain 0



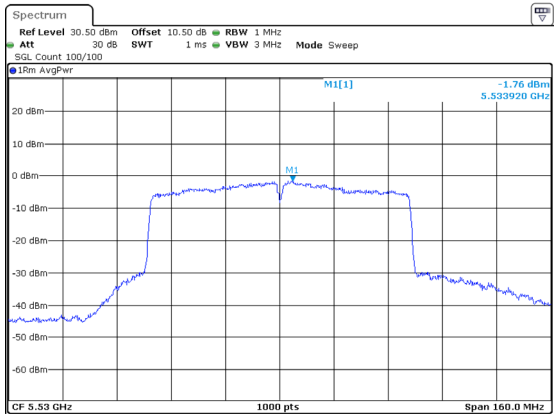
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 18:43:51

802.11ac80_5690MHz_Chain 0



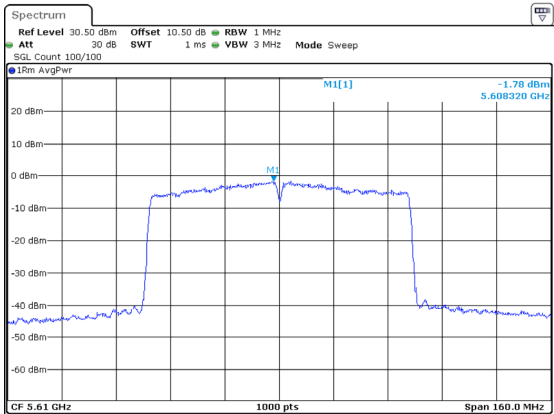
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 18:44:42

802.11ac80_5530MHz_Chain 1



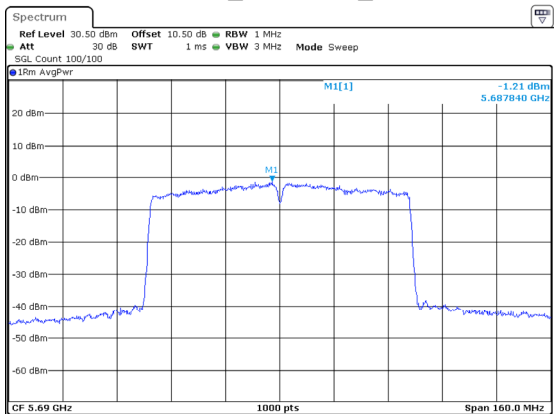
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 11:32:13

802.11ac80_5610MHz_Chain 1



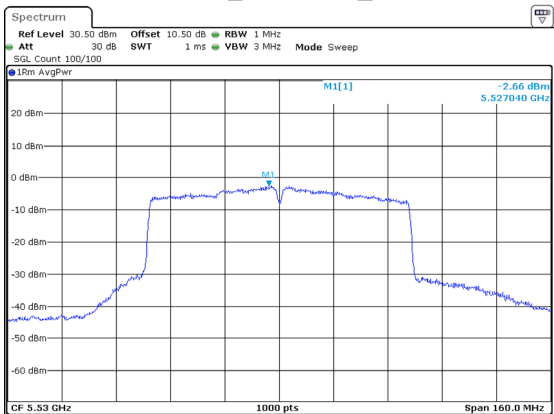
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 11:33:18

802.11ac80_5690MHz_Chain 1



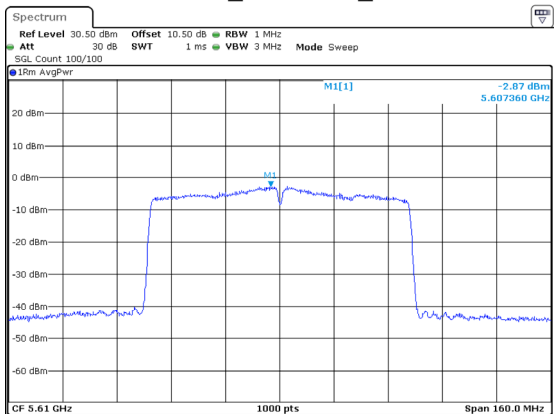
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Date: 6.DEC.2024 11:36:18

802.11ac80_5530MHz_Chain 2



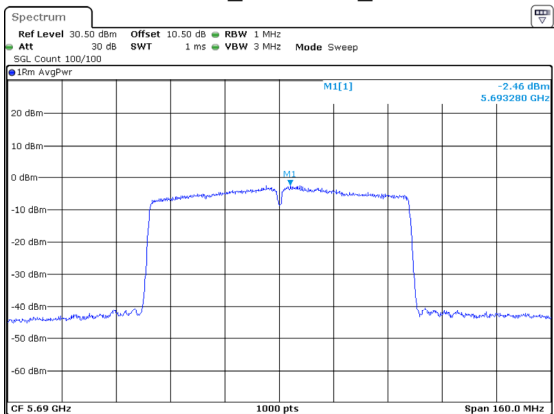
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Date: 6.DEC.2024 11:05:19

802.11ac80_5610MHz_Chain 2



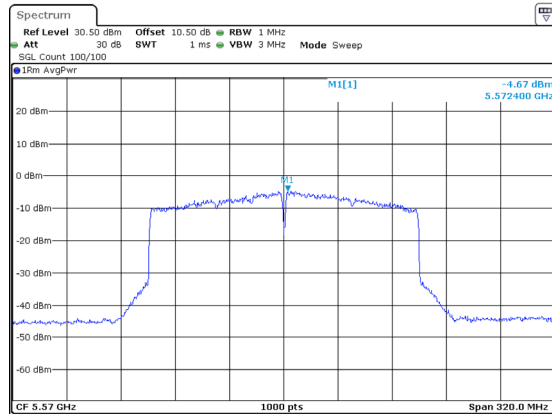
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 15:07:02

802.11ac80_5690MHz_Chain 2



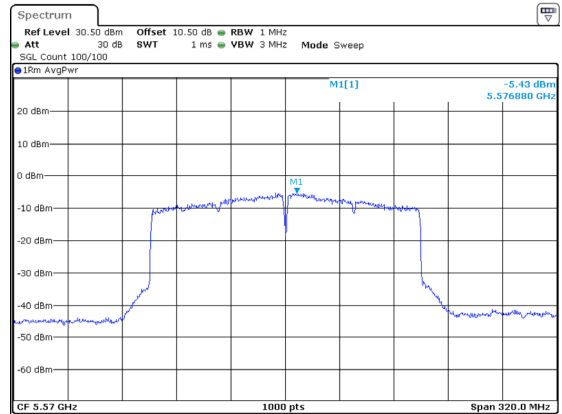
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Date: 6.DEC.2024 15:08:18

802.11ax160_5570MHz_RU_Full_Chain 0



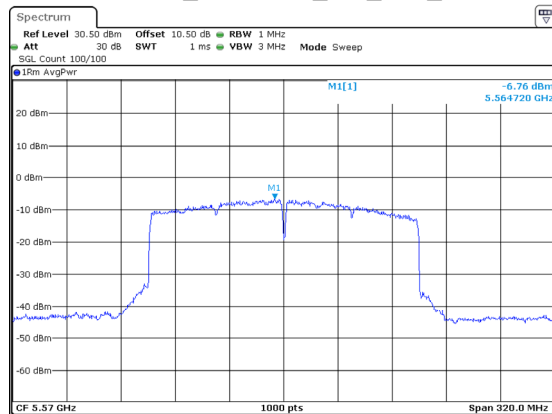
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 19:26:15

802.11ax160_5570MHz_RU_Full_Chain 1



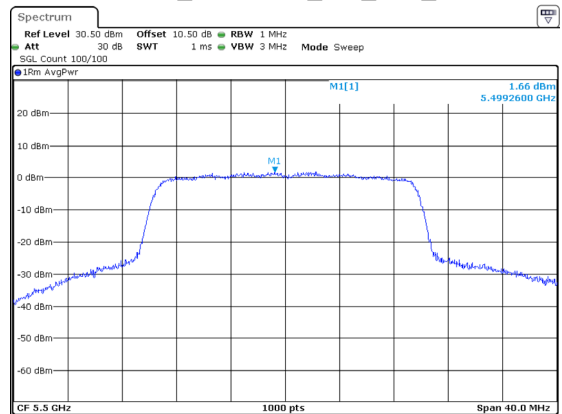
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Date: 6.DEC.2024 13:12:19

802.11ax160_5570MHz_RU_Full_Chain 2



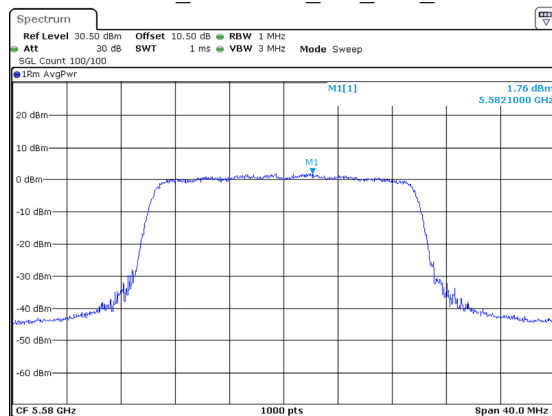
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Date: 6.DEC.2024 19:32:11

802.11ax20_5500MHz_RU_Full_Chain 0



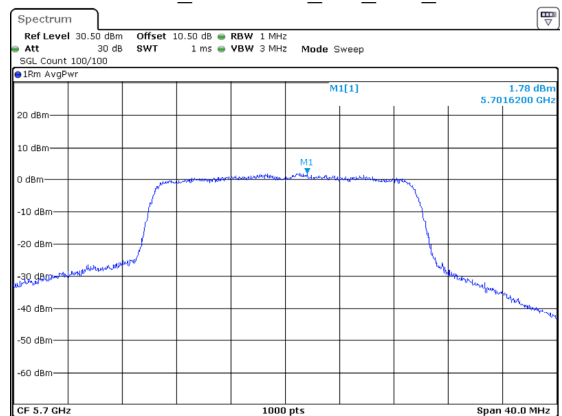
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Date: 5.DEC.2024 18:51:28

802.11ax20_5580MHz_RU_Full_Chain 0



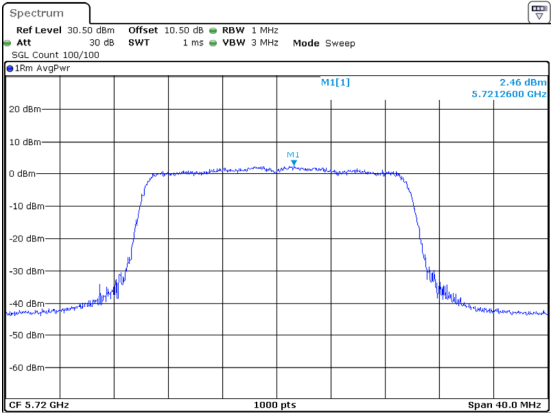
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Date: 5.DEC.2024 18:53:06

802.11ax20_5700MHz_RU_Full_Chain 0



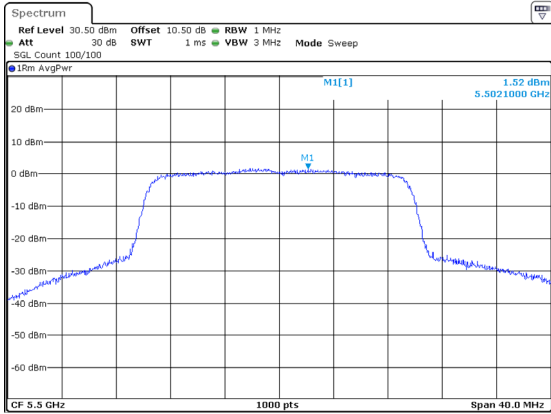
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Date: 5.DEC.2024 18:54:48

802.11ax20_5720MHz_RU_Full_Chain 0



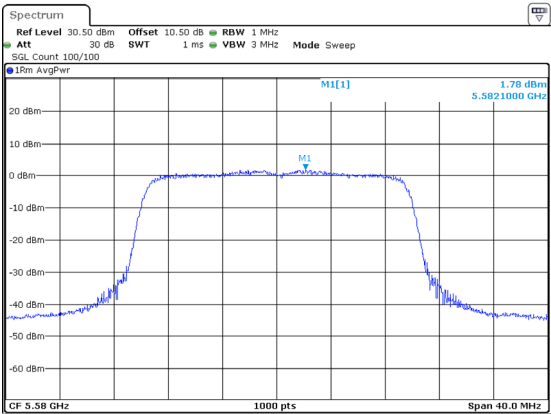
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Date: 5.DEC.2024 18:56:08

802.11ax20_5500MHz_RU_Full_Chain 1



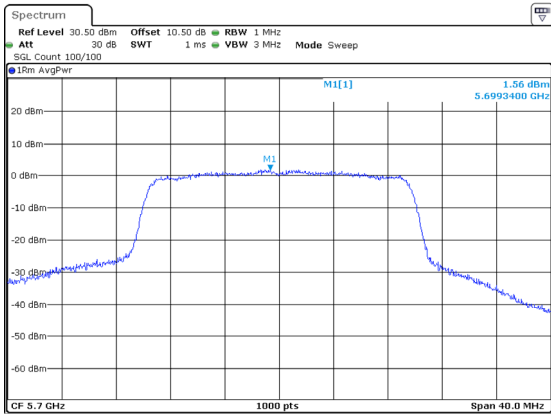
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Date: 6.DEC.2024 11:46:12

802.11ax20_5580MHz_RU_Full_Chain 1



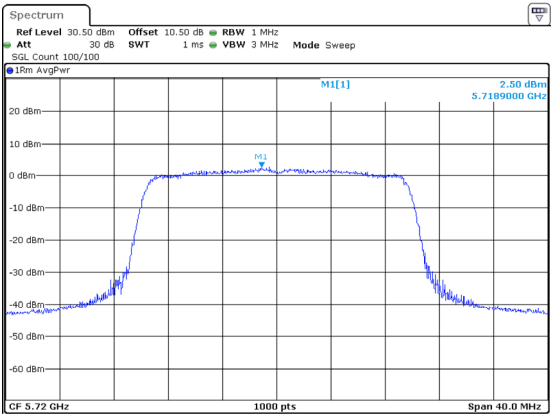
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Date: 6.DEC.2024 11:47:42

802.11ax20_5700MHz_RU_Full_Chain 1



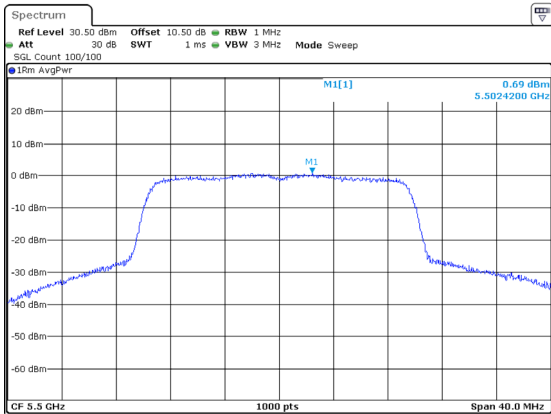
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802.11ax20_5720MHz_RU_Full_Chain 1



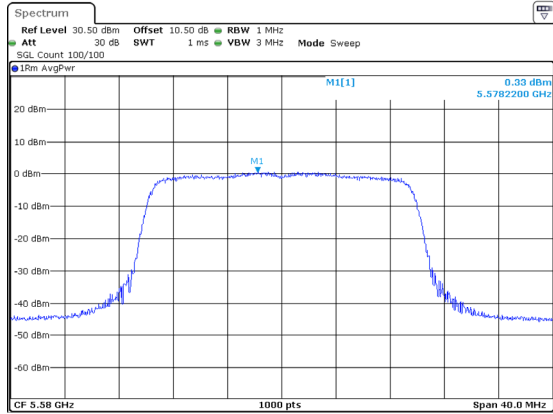
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802.11ax20_5500MHz_RU_Full_Chain 2



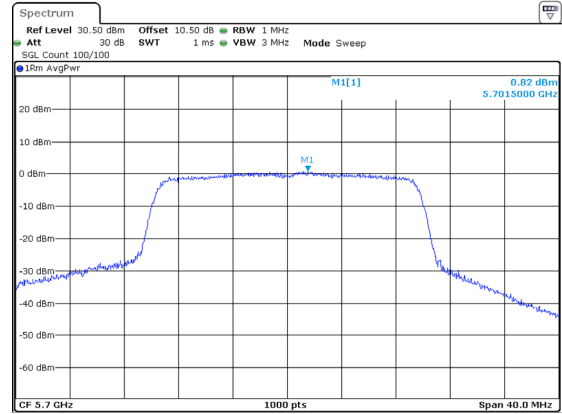
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Date: 6.DEC.2024 15:15:13

802.11ax20_5580MHz_RU_Full_Chain 2



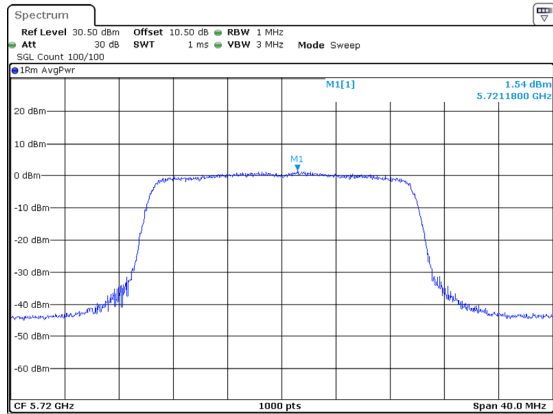
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Date: 6.DEC.2024 15:16:48

802.11ax20_5700MHz_RU_Full_Chain 2



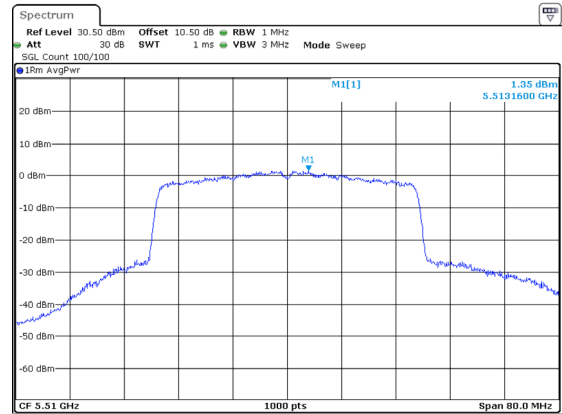
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Date: 6.DEC.2024 15:18:34

802.11ax20_5720MHz_RU_Full_Chain 2



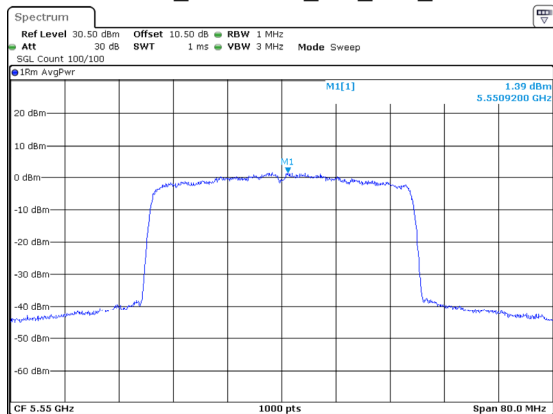
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Date: 6.DEC.2024 15:20:09

802.11ax40_5510MHz_RU_Full_Chain 0



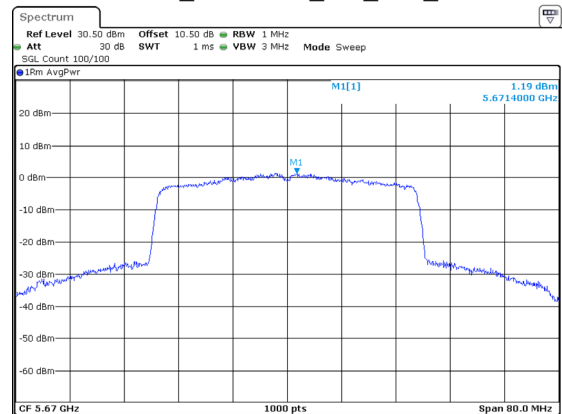
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Date: 5.DEC.2024 15:57:14

802.11ax40_5550MHz_RU_Full_Chain 0



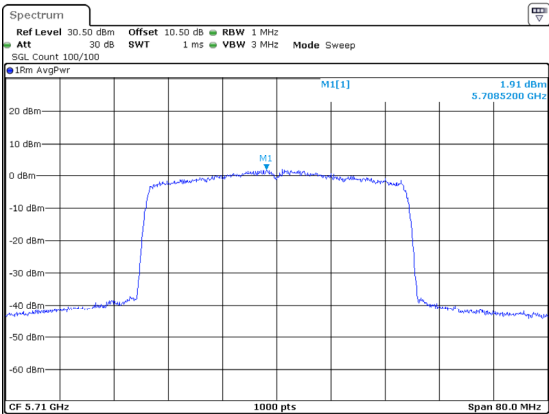
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Date: 5.DEC.2024 18:58:16

802.11ax40_5670MHz_RU_Full_Chain 0



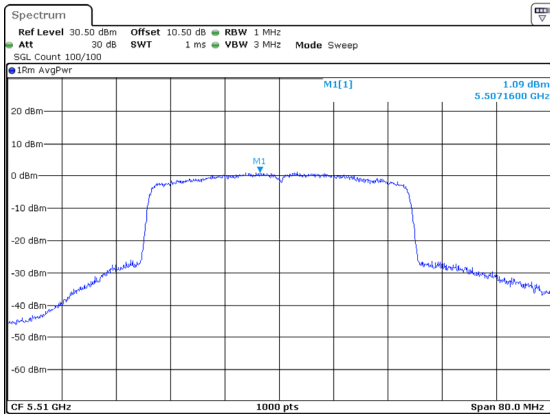
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Date: 5.DEC.2024 19:00:55

802.11ax40_5710MHz_RU_Full_Chain 0



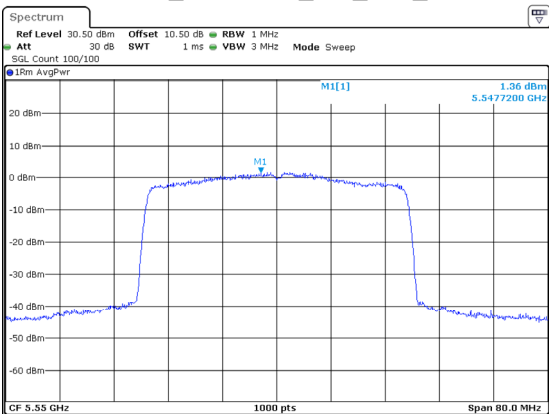
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802.11ax40_5510MHz_RU_Full_Chain 1



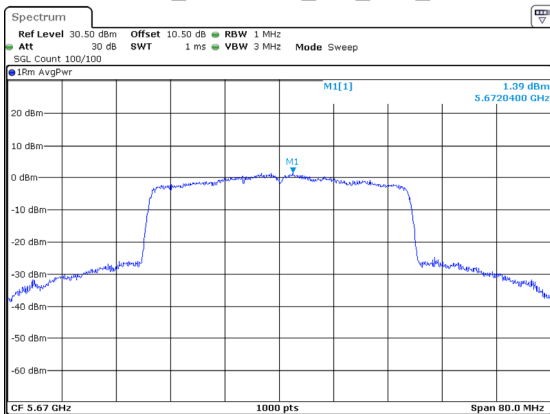
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Date: 6.DEC.2024 11:52:47

802.11ax40_5550MHz_RU_Full_Chain 1



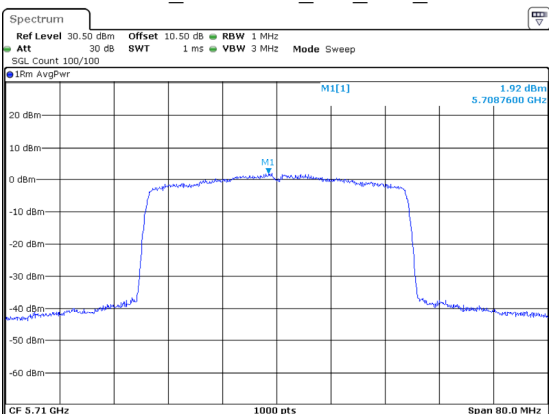
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Date: 6.DEC.2024 11:54:01

802.11ax40_5670MHz_RU_Full_Chain 1



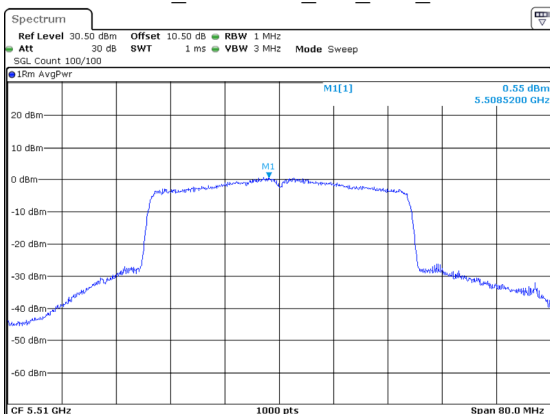
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Date: 6.DEC.2024 11:55:10

802.11ax40_5710MHz_RU_Full_Chain 1



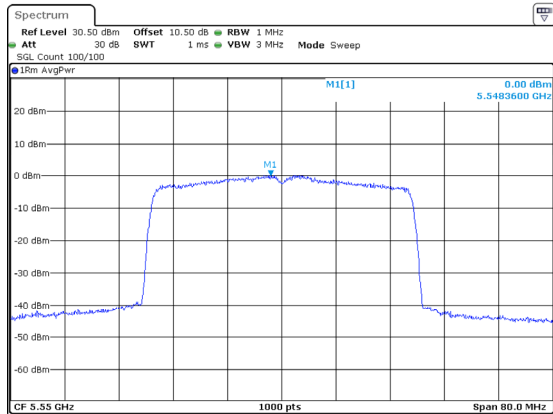
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 11:57:44

802.11ax40_5510MHz_RU_Full_Chain 2



ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 15:21:54

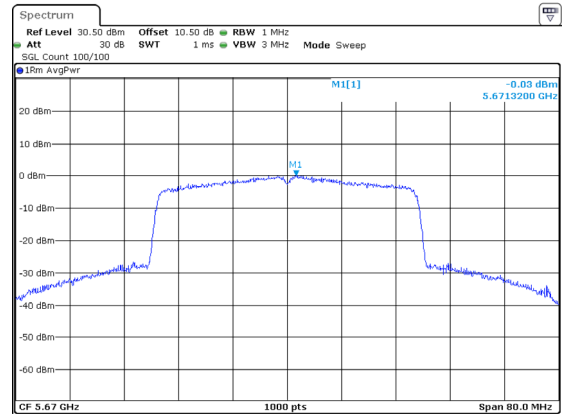
802.11ax40_5550MHz_RU_Full_Chain 2



ProjectNo.:2401Y27848E-RF Tester:Allen Bai

Date: 6.DEC.2024 19:23:08

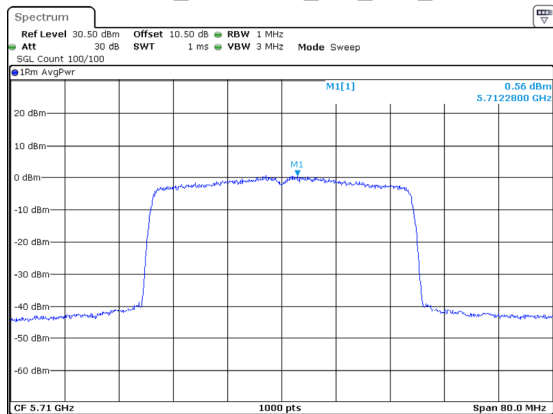
802.11ax40_5670MHz_RU_Full_Chain 2



ProjectNo.:2401Y27848E-RF Tester:Allen Bai

Date: 6.DEC.2024 19:24:24

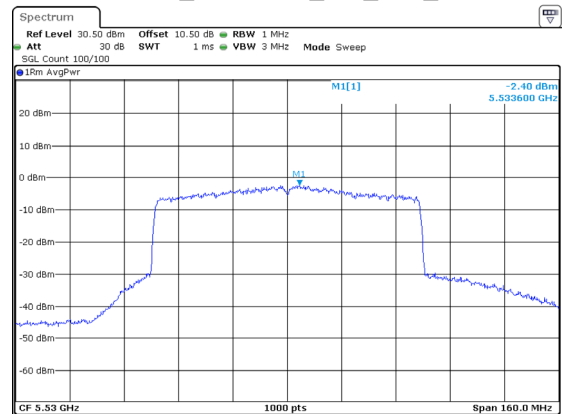
802.11ax40_5710MHz_RU_Full_Chain 2



ProjectNo.:2401Y27848E-RF Tester:Allen Bai

Date: 6.DEC.2024 19:25:32

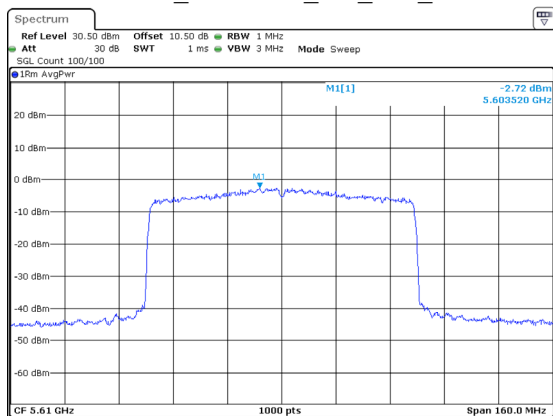
802.11ax80_5530MHz_RU_Full_Chain 0



ProjectNo.:2401Y27848E-RF Tester:Allen Bai

Date: 5.DEC.2024 19:22:21

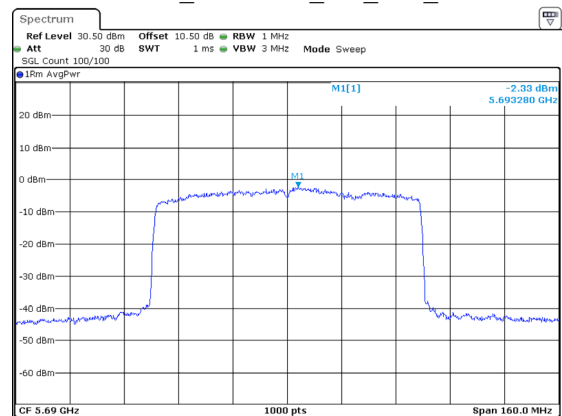
802.11ax80_5610MHz_RU_Full_Chain 0



ProjectNo.:2401Y27848E-RF Tester:Allen Bai

Date: 5.DEC.2024 19:23:24

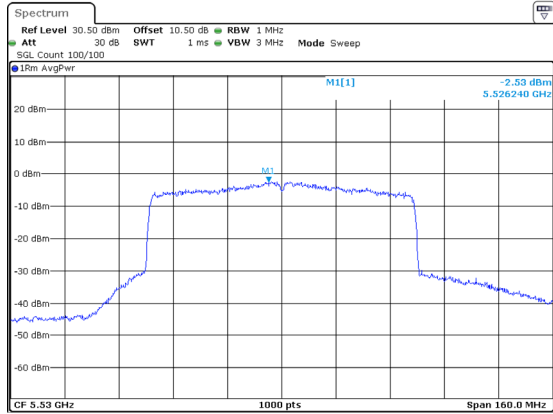
802.11ax80_5690MHz_RU_Full_Chain 0



ProjectNo.:2401Y27848E-RF Tester:Allen Bai

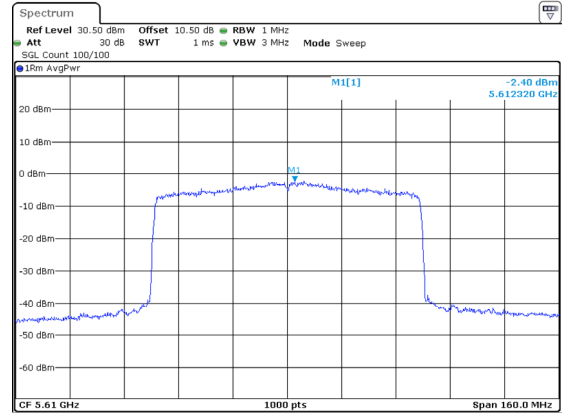
Date: 5.DEC.2024 19:24:25

802.11ax80_5530MHz_RU_Full_Chain 1



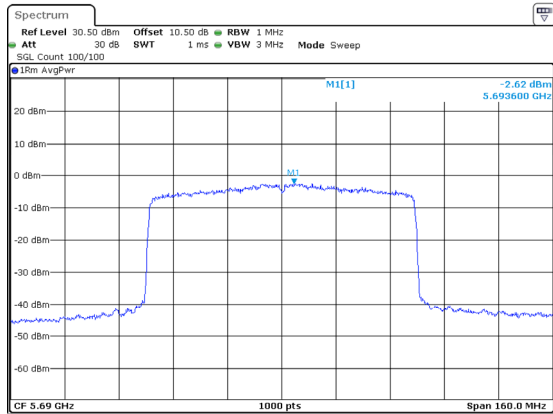
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 13:07:51

802.11ax80_5610MHz_RU_Full_Chain 1



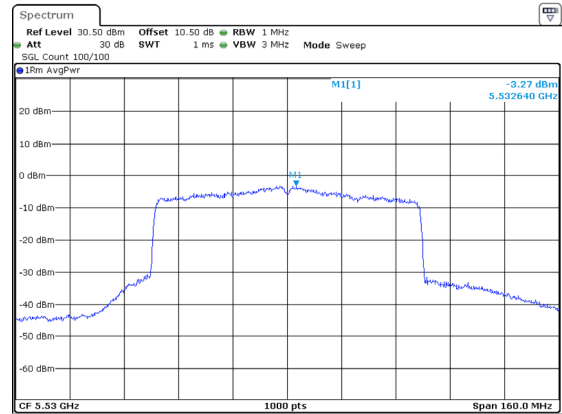
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 13:08:56

802.11ax80_5690MHz_RU_Full_Chain 1



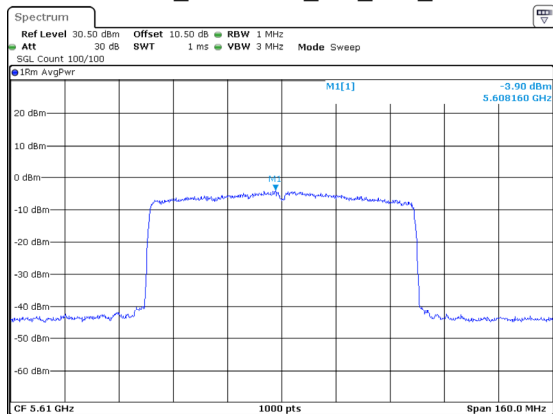
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Date: 6.DEC.2024 13:10:51

802.11ax80_5530MHz_RU_Full_Chain 2



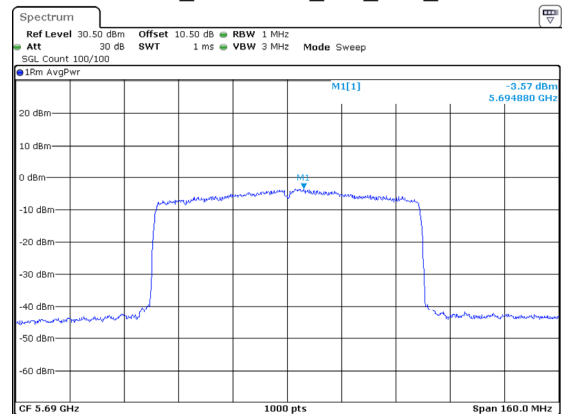
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 13:12:59

802.11ax80_5610MHz_RU_Full_Chain 2



ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 15:29:15

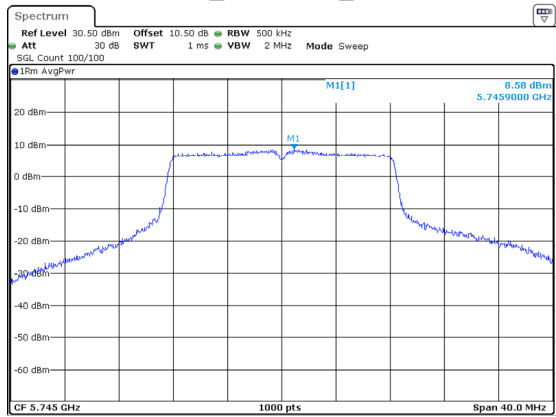
802.11ax80_5690MHz_RU_Full_Chain 2



ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 15:30:43

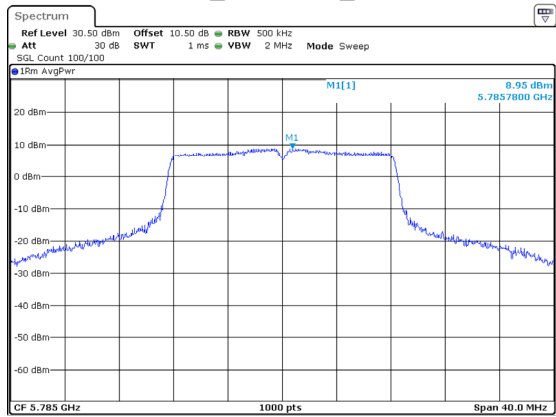
5725-5850MHz

802.11a_5745MHz_Chain 0



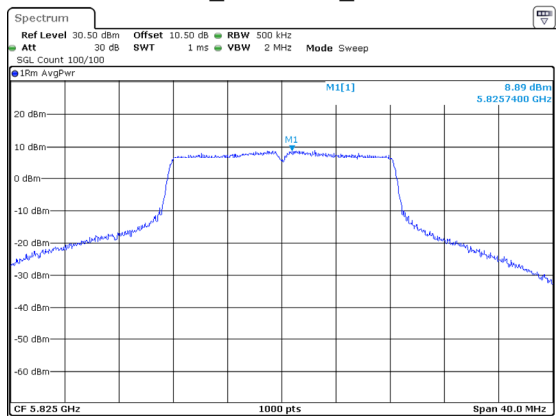
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 16:37:48

802.11a_5785MHz_Chain 0



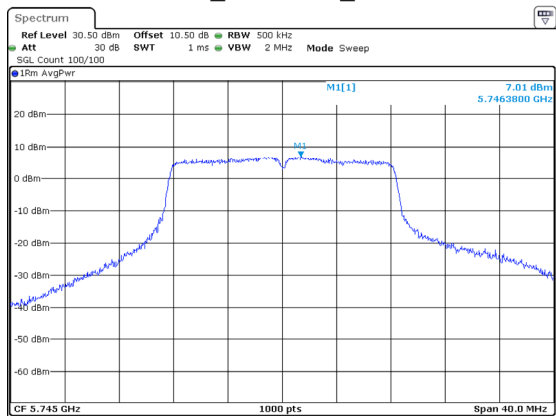
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Date: 6.DEC.2024 16:38:09

802.11a_5825MHz_Chain 0



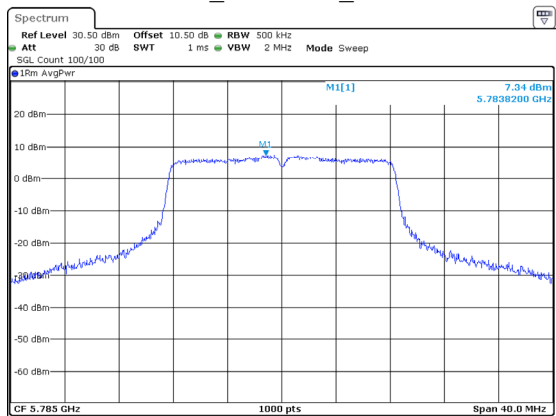
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802.11a_5745MHz_Chain 1



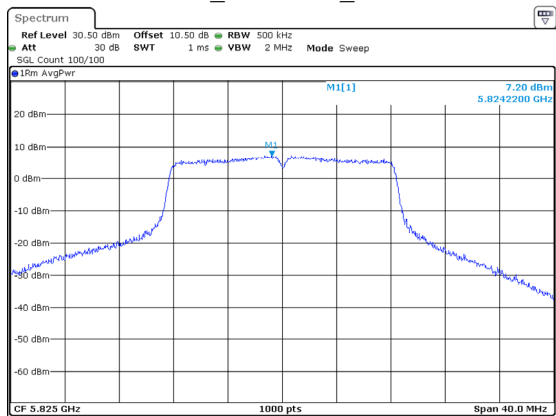
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802.11a_5785MHz_Chain 1

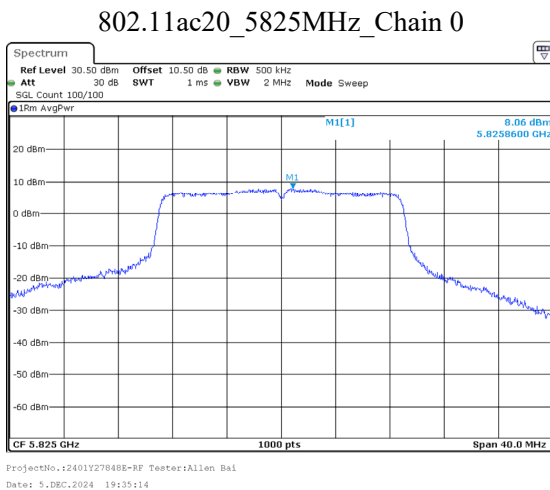
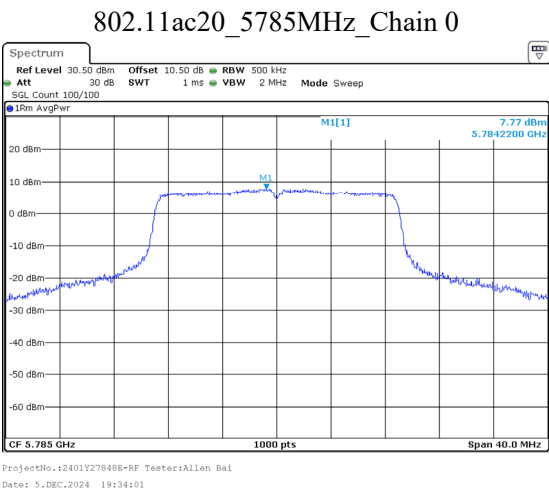
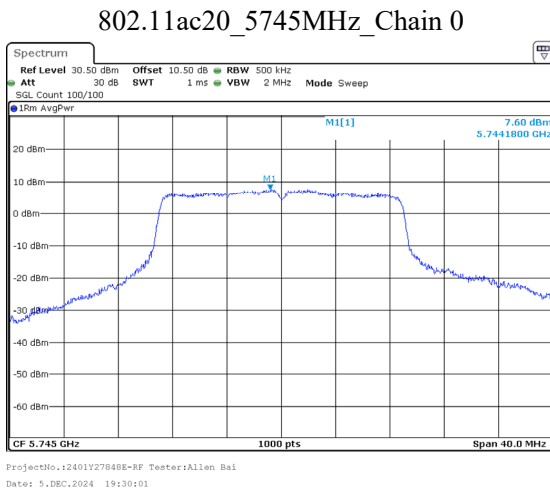
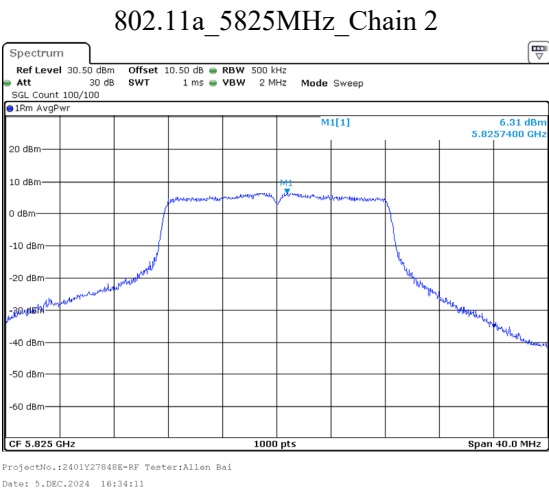
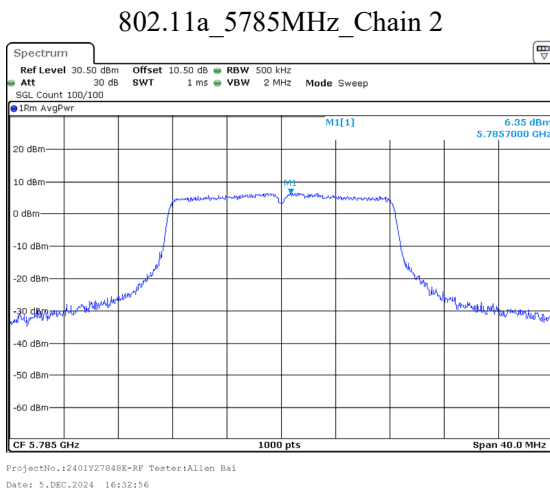
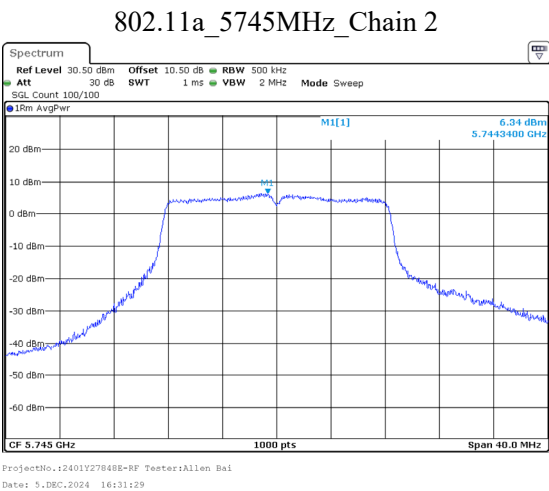


ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 15:58:45

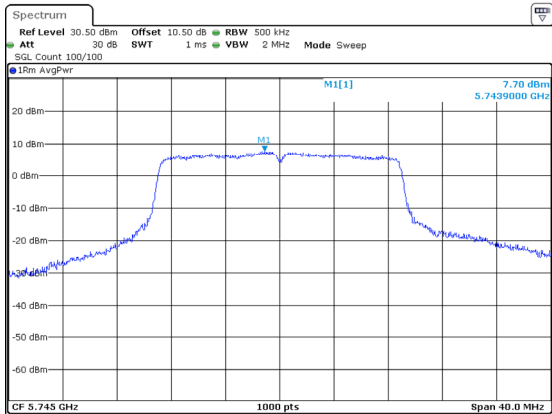
802.11a_5825MHz_Chain 1



ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 16:00:10

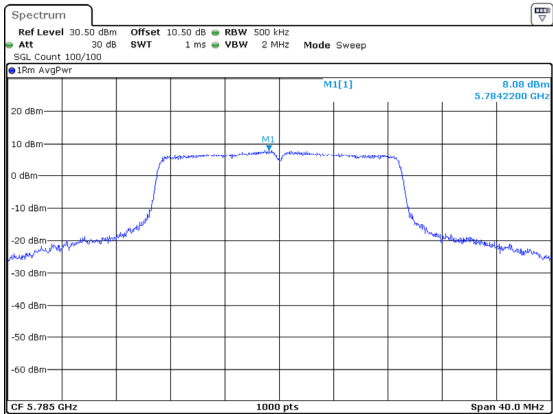


802.11ac20_5745MHz_Chain 1



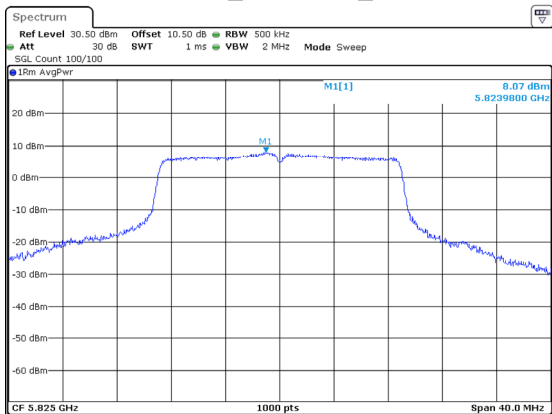
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 13:14:54

802.11ac20_5785MHz_Chain 1



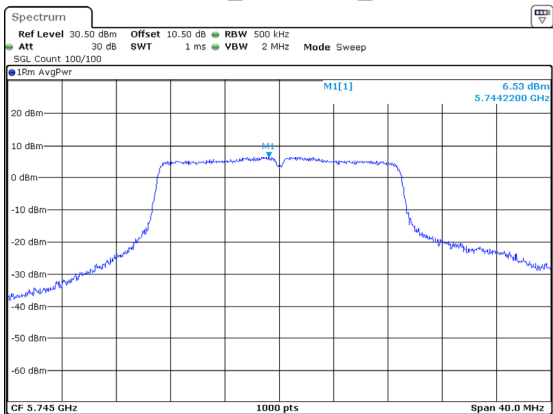
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802.11ac20_5825MHz_Chain 1



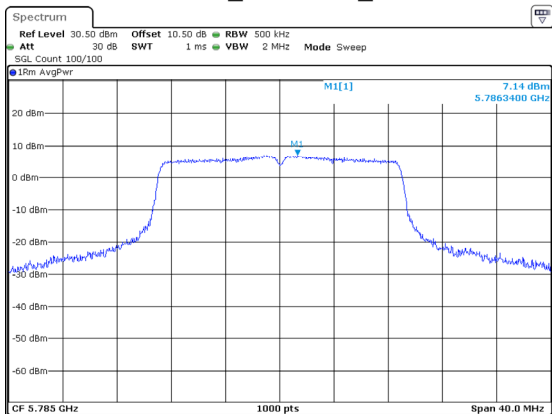
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 13:17:55

802.11ac20_5745MHz_Chain 2



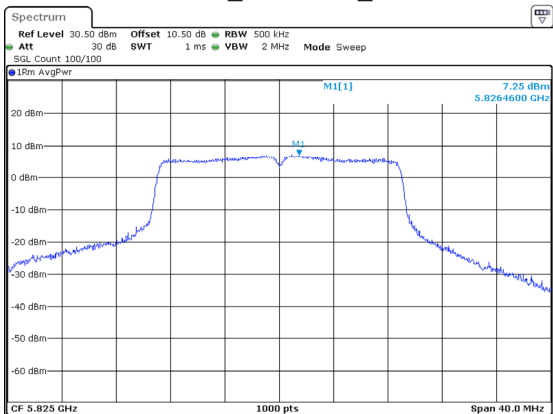
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 13:14:42

802.11ac20_5785MHz_Chain 2



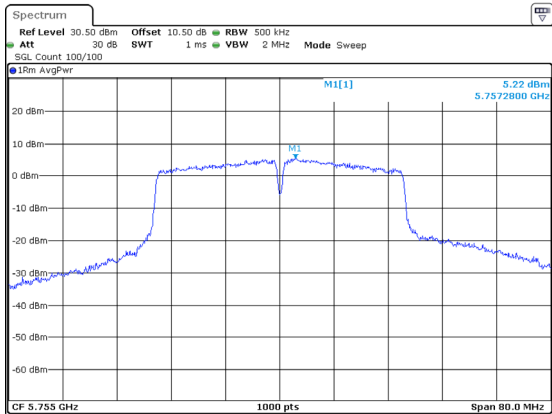
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 13:36:15

802.11ac20_5825MHz_Chain 2



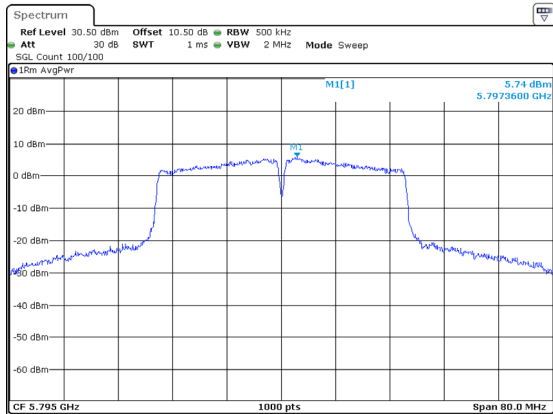
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 13:37:33

802.11ac40_5755MHz_Chain 0



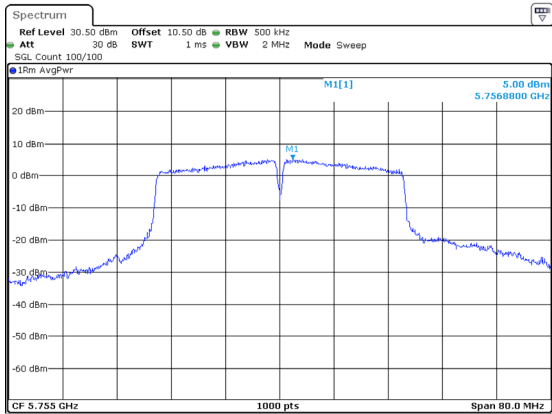
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 19:36:12

802.11ac40_5795MHz_Chain 0



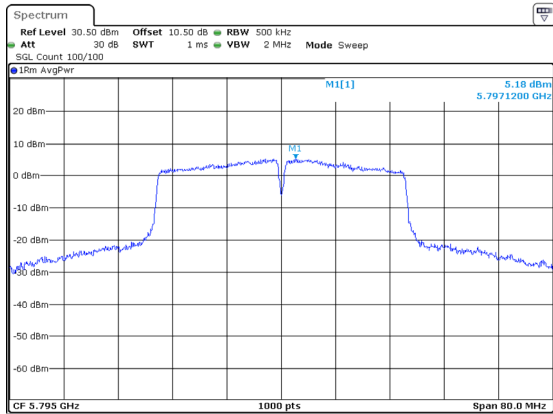
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 19:37:00

802.11ac40_5755MHz_Chain 1



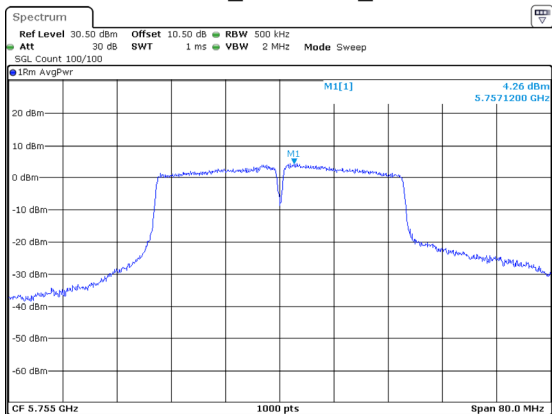
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 13:19:06

802.11ac40_5795MHz_Chain 1



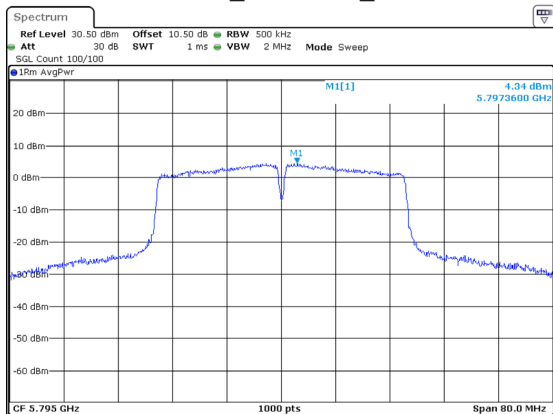
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 13:20:12

802.11ac40_5755MHz_Chain 2



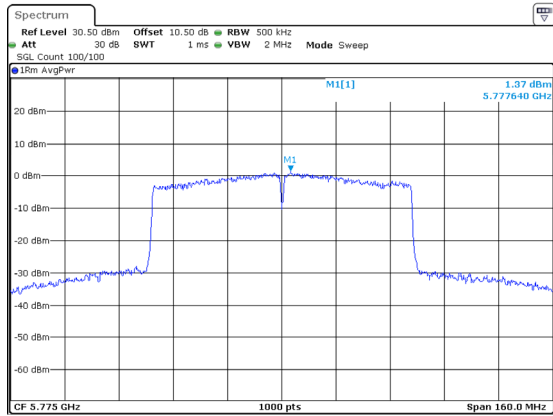
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 15:38:48

802.11ac40_5795MHz_Chain 2



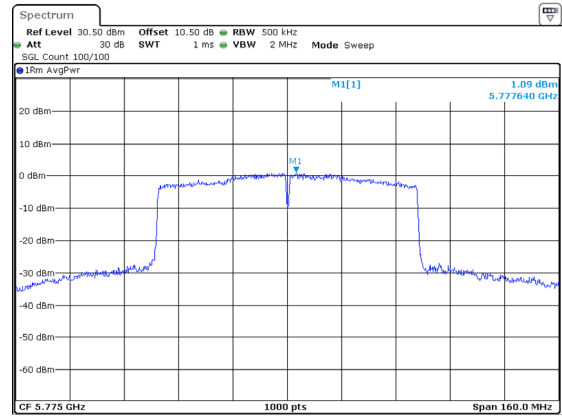
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 15:39:44

802.11ac80_5775MHz_Chain 0



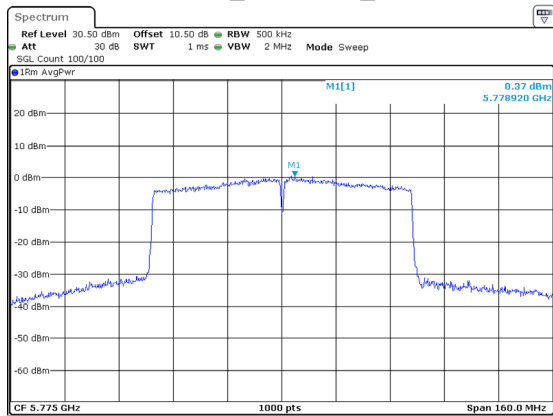
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 19:38:08

802.11ac80_5775MHz_Chain 1



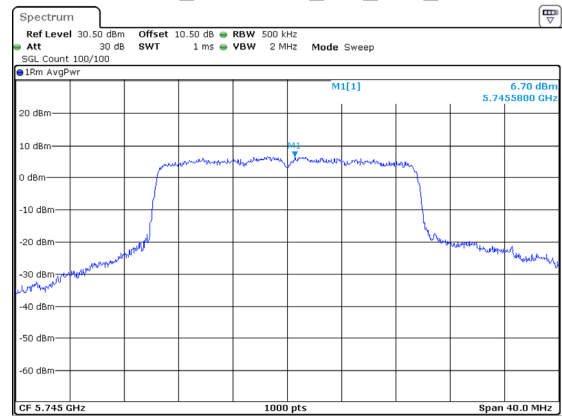
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 19:21:38

802.11ac80_5775MHz_Chain 2



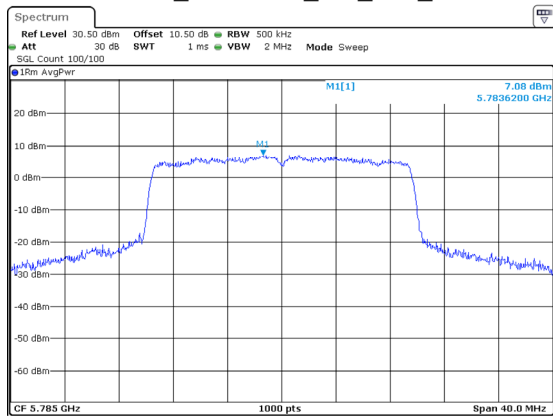
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Date: 6.DEC.2024 19:40:56

802.11ax20_5745MHz_RU_Full_Chain 0



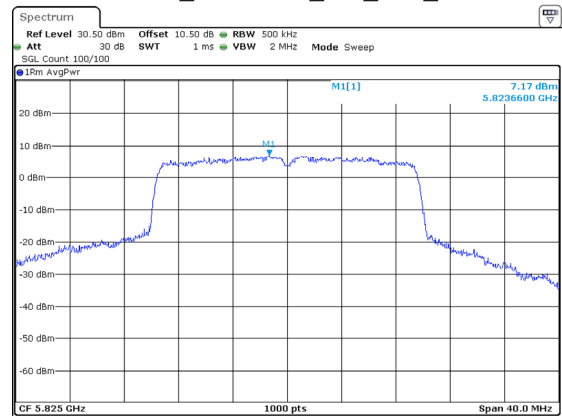
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 19:41:09

802.11ax20_5785MHz_RU_Full_Chain 0



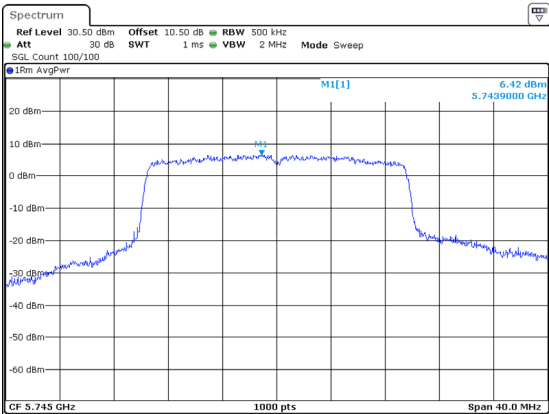
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 19:42:43

802.11ax20_5825MHz_RU_Full_Chain 0



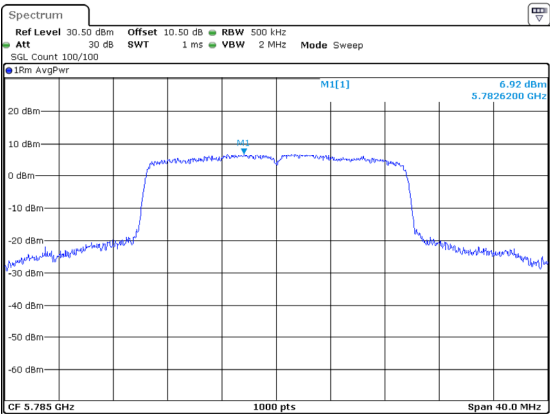
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 19:43:52

802.11ax20_5745MHz_RU_Full_Chain 1



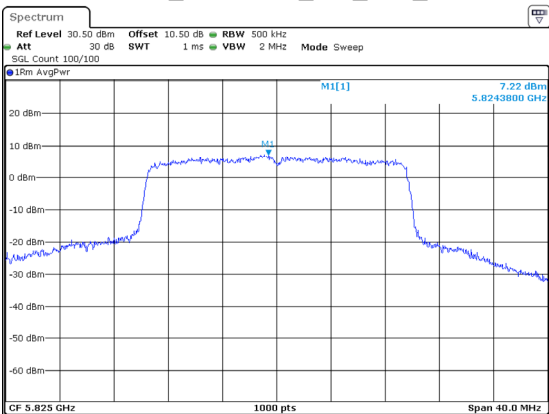
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 13:25:16

802.11ax20_5785MHz_RU_Full_Chain 1



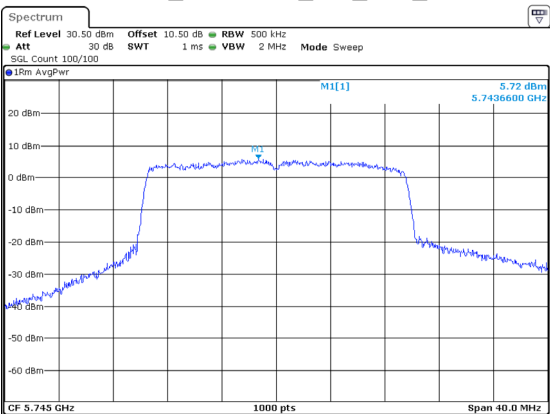
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 13:27:03

802.11ax20_5825MHz_RU_Full_Chain 1



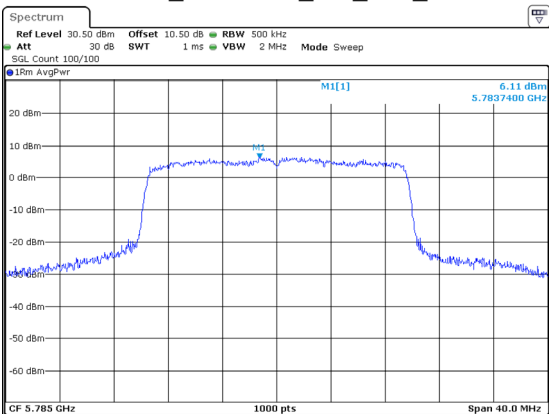
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 13:28:15

802.11ax20_5745MHz_RU_Full_Chain 2



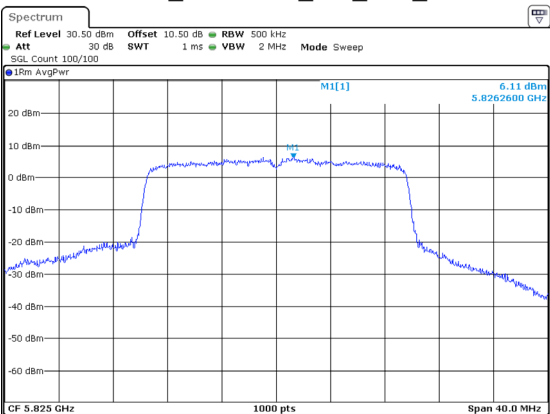
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 13:43:33

802.11ax20_5785MHz_RU_Full_Chain 2



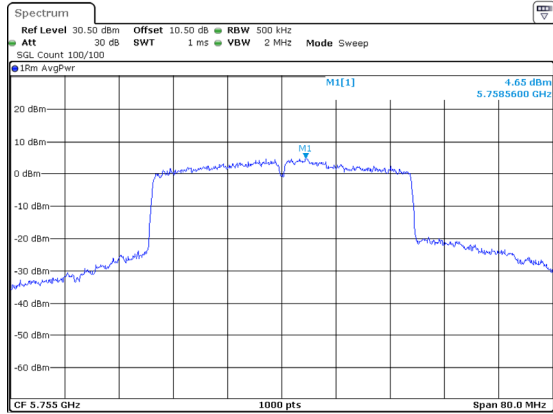
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Date: 6.DEC.2024 15:45:04

802.11ax20_5825MHz_RU_Full_Chain 2

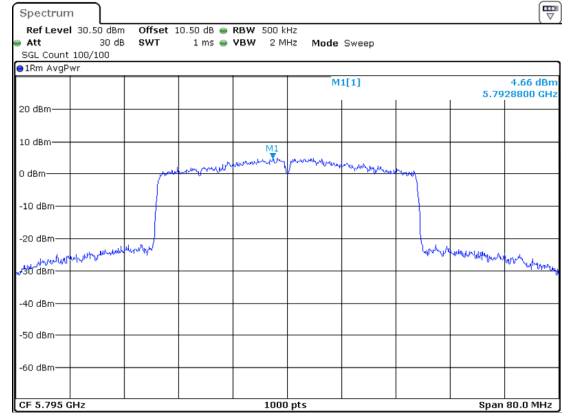


ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 15:46:20

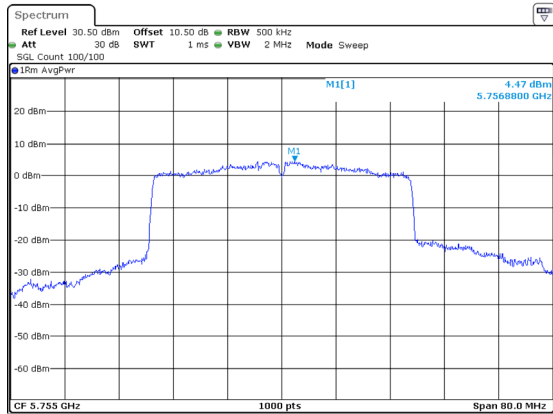
802.11ax40_5755MHz_RU_Full_Chain 0



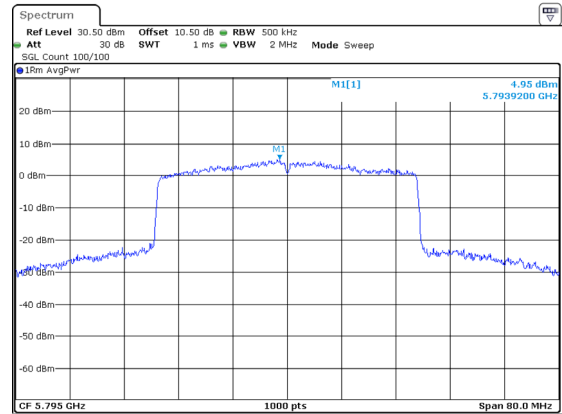
802.11ax40_5795MHz_RU_Full_Chain 0



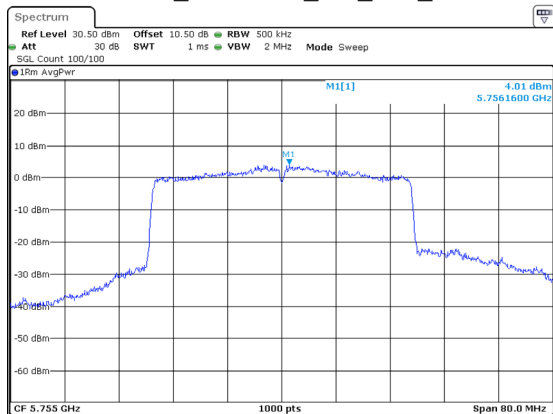
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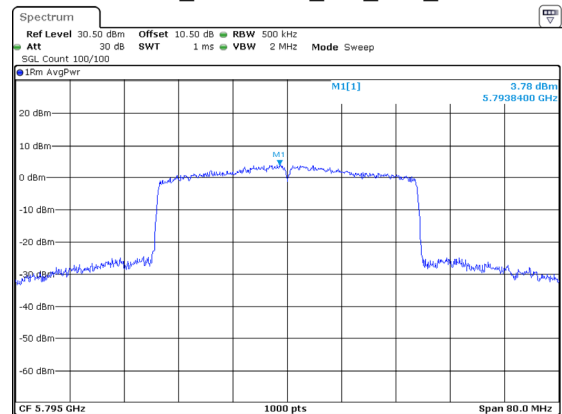
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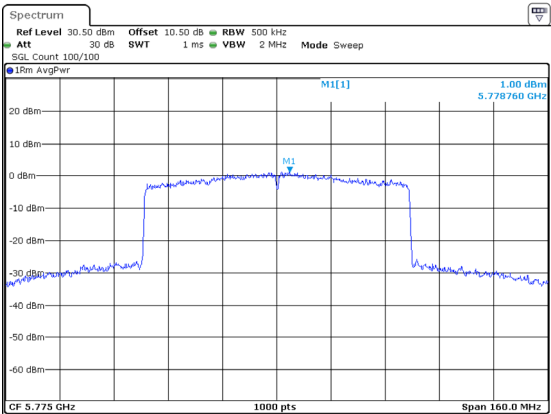
802.11ax40_5755MHz_RU_Full_Chain 2



802.11ax40_5795MHz_RU_Full_Chain 2

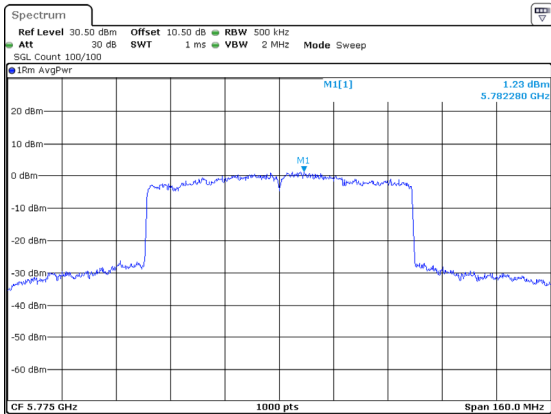


802.11ax80_5775MHz_RU_Full_Chain 0



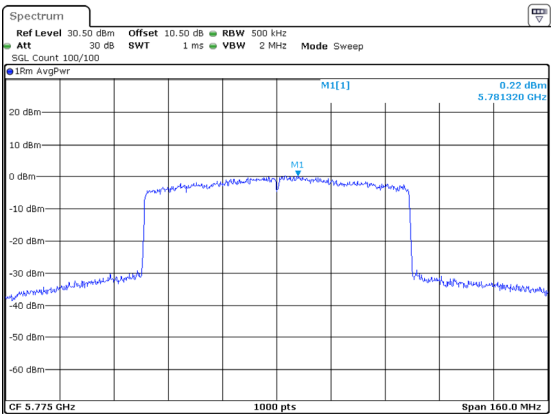
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 19:47:54

802.11ax80_5775MHz_RU_Full_Chain 1



ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 13:31:16

802.11ax80_5775MHz_RU_Full_Chain 2



ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 6.DEC.2024 15:49:42

Duty Cycle

Test Information:

Sample No.:	2TPH-12	Test Date:	2024/12/05
Test Site:	RF	Test Mode:	Transmitting
Tester:	Allen Bai	Test Result:	N/A

Environmental Conditions:

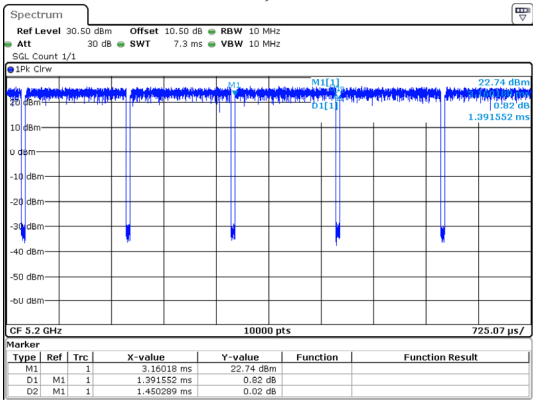
Temperature: (°C):	26.7	Relative Humidity: (%)	59	ATM Pressure: (kPa)	101
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Test Data:

Mode	Antenna	Test Frequency (MHz)	Ton (ms)	Ton+Toff (ms)	Duty Cycle (%)	Duty Cycle Factor(dB)	1/Ton (Hz)	VBW Setting (kHz)
802.11a	Chain 0	5200	1.392	1.450	96.00	0.18	718	1
802.11ac20	Chain 0	5200	1.310	1.368	95.76	0.19	763	1
802.11ac40	Chain 0	5190	0.655	0.713	91.87	0.37	1527	2
802.11ac80	Chain 0	5210	0.324	0.381	85.04	0.70	3086	5
802.11ac160	Chain 0	5250	0.184	0.241	76.35	1.17	5435	10
802.11ax20_RU_Full	Chain 0	5200	0.316	0.373	84.72	0.72	3165	5
802.11ax40_RU_Full	Chain 0	5190	0.182	0.236	77.12	1.13	5495	10
802.11ax80_RU_Full	Chain 0	5210	0.130	0.187	69.52	1.58	7692	10
802.11ax160_RU_Full	Chain 0	5250	0.297	0.354	83.90	0.76	3367	5

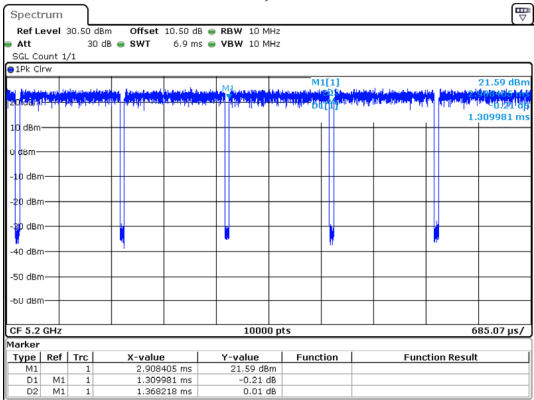
Duty Cycle = Ton/(Ton+Toff)*100%

802.11a_5200MHz_Chain 0
1.392ms,1.450ms



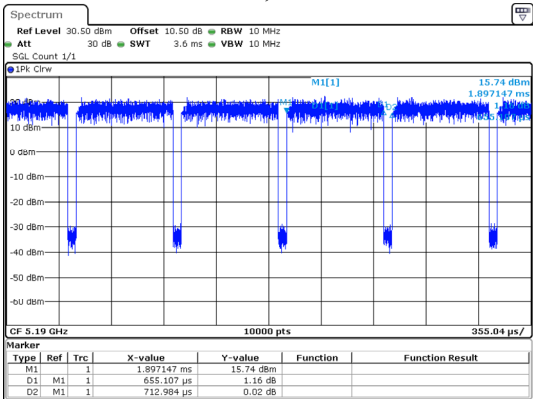
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 14:04:16

802.11ac20_5200MHz_Chain 0
1.310ms,1.368ms



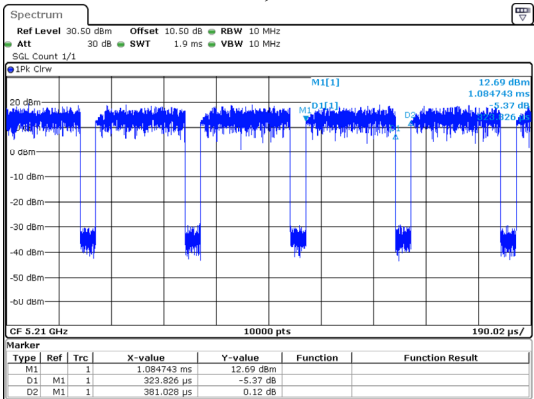
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 14:07:23

802.11ac40_5190MHz_Chain 0
0.655ms,0.713ms



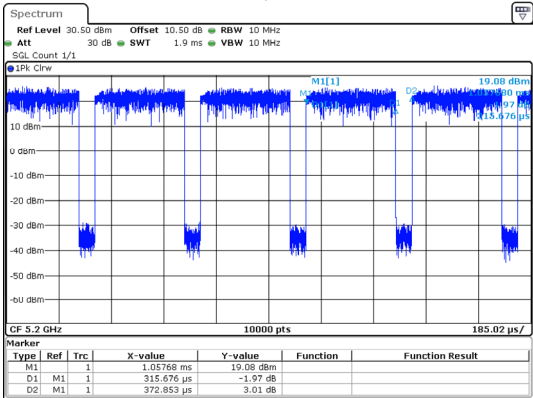
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 14:10:12

802.11ac80_5210MHz_Chain 0
0.324ms,0.381ms



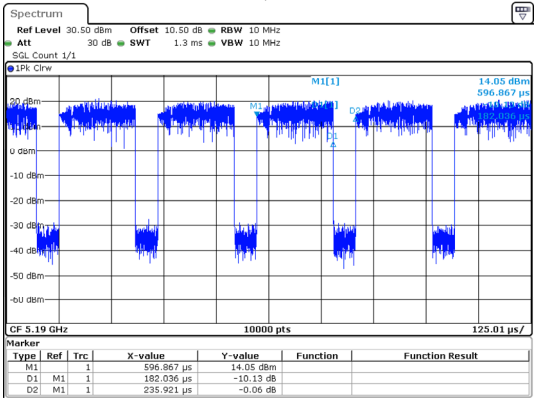
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 14:11:50

802.11ax20_5200MHz_RU_Full_Chain 0
0.316ms,0.373ms



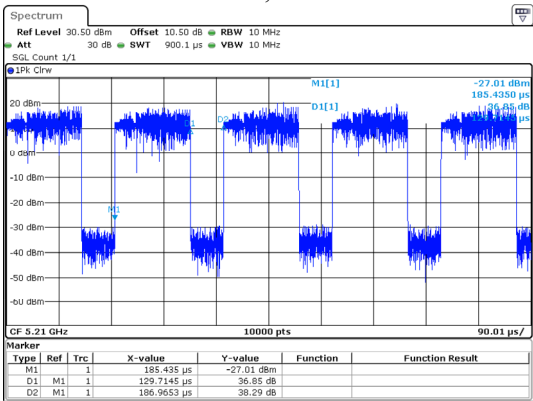
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 14:15:03

802.11ax40_5190MHz_RU_Full_Chain 0
0.182ms,0.236ms



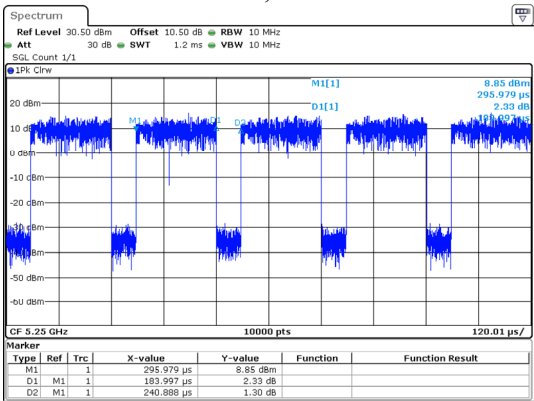
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 14:16:33

802.11ax80_5210MHz_RU_Full_Chain 0
0.130ms,0.187ms



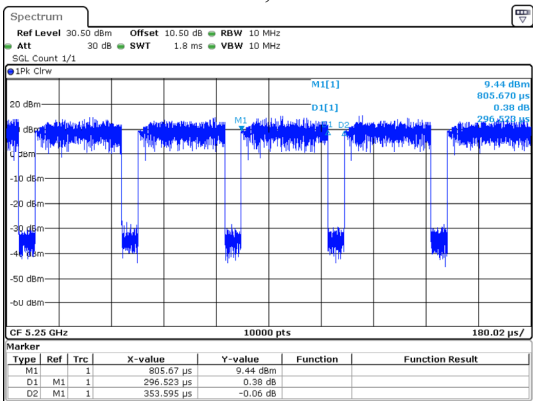
ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 14:19:34

802.11ac160_5250MHz_Chain 0
0.184ms,0.241ms



ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 18:04:02

802.11ax160_5250MHz_RU_Full_Chain 0
0.297ms,0.354ms



ProjectNo.:2401Y27848E-RF Tester:Allen Bai
Date: 5.DEC.2024 18:07:32

RF EXPOSURE EVALUATION

MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

(B) Limits for General Population/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)	Averaging Time (minutes)
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f ²)	30
30–300	27.5	0.073	0.2	30
300–1500	/	/	f/1500	30
1500–100,000	/	/	1.0	30

f = frequency in MHz; * = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

Result

Calculation formula:

Prediction of power density at the distance of the applicable MPE limit

$S = PG/4\pi R^2$ = power density (in appropriate units, e.g. mW/cm²);

P = power input to the antenna (in appropriate units, e.g., mW);

G = power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain;

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm);

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

Calculated Data:

For worst case:

Mode	Frequency (MHz)	Antenna Gain [#]		Max Tune-up Power [#]		Evaluation Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)
		(dBi)	(numeric)	(dBm)	(mW)			
2.4G Wi-Fi	2412-2462	7.64	5.81	29.0	794.33	31	0.3822	1.0
5G Wi-Fi	5150-5250	8.67	7.36	25.0	316.23	31	0.1927	1.0
	5250-5350	8.67	7.36	21.5	141.25	31	0.0861	1.0
	5470-5725	8.67	7.36	21.0	125.89	31	0.0767	1.0
	5725-5850	8.67	7.36	26.5	446.68	31	0.2722	1.0
	5850-5895	8.67	7.36	26.0	398.11	31	0.2426	1.0

Note:

- 1) The tune up conducted power and antenna gain was declared by the applicant.
- 2) The antenna gain should be the directional gain.
- 3) The 2.4G Wi-Fi and 5G Wi-Fi can Simultaneous transmitting.

Simultaneous transmitting consideration (worst case):

The ratio= $\text{MPE}_{2.4\text{G Wi-Fi}}/\text{limit} + \text{MPE}_{5\text{G Wi-Fi}}/\text{limit} = 0.3822/1.0 + 0.2722/1.0 = 0.654 < 1.0$,
so simultaneous exposure is compliant.

To maintain compliance with the FCC's RF exposure guidelines, place the equipment at least 31cm from nearby persons.

Result: Compliant.

EUT PHOTOGRAPHS

Please refer to the attachment 2401Y27848E-RF External photo and 2401Y27848E-RF Internal photo.

TEST SETUP PHOTOGRAPHS

Please refer to the attachment 2401Y27848E-RFB Test Setup photo.

***** **END OF REPORT** *****